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PPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/716,514	11/20/2003	Toru Tanzawa	245657US2S 5628			
22850 75	22850 7590 05/09/2005			EXAMINER		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MIS, DAVID C			
			ART UNIT	PAPER NUMBER		
			2817			
			DATE MAILED: 05/09/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	m Ma	Applicant(s)				
Office Action Summary		Application	on No.	дринсанц <i>э)</i>	(m)			
		10/716,51	14	TANZAWA, TORU				
		Examiner		Art Unit				
		David Mis		2817				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE   - External after - If the - If NC - Failur	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN asions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply specified above is less than thirty (5) period for reply is specified above, the maximum so the to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no even nunication. 30) days, a reply within the state tatutory period will apply and with the state of the apply and with the state of the apply and with the state of the apply and with the apply and will, by statute, cause the apply and will, by statute, cause the apply and will, by statute, and apply and will apply apply and will apply and will apply apply and will apply and will apply ap	ent, however, may a reply be timutory minimum of thirty (30) days ill expire SIX (6) MONTHS from lication to become ABANDONE	nely filed s will be considered timely. the mailing date of this common (35 U.S.C. § 133).	munication.			
Status								
1)  🏹	Responsive to communication(s) file	ed on 20 November 2	003					
· · · ·		2b)⊠ This action is n						
3)	<u> </u>							
٠,٠	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims	•	• , , ,					
·		application						
•								
	<ul> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) 1-12 is/are allowed.</li> </ul>							
· —	)⊠ Claim(s) <u>1-12</u> is/are allowed. )⊠ Claim(s) <u>13,16 and 17</u> is/are rejected.							
· · · · · · · · · · · · · · · · · · ·	7)⊠ Claim(s) <u>13,16 and 19</u> is/are objected to.							
· —	Claim(s) are subject to restri		equirement.					
	on Papers		•					
	•	Francisco						
9) The specification is objected to by the Examiner.								
10)[	10) ☐ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. § 119	·						
	_	for foreign priority up	der 35 U.S.C. & 110(a)	I-(d) or (f)				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:								
u),	1. ☐ Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
			·					
Attachmen	t(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date								
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 1120.  5) Notice of Informal Patent Application (PTO-152)  6) Other:								

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The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High

Technology Technical Amendments Act of 2002 do not apply when the

reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the

prior art date of the reference is determined under 35 U.S.C. 102(e) prior to

the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 13, 16 and 17 are rejected under 35 U.S.C. 102(e.) as being clearly anticipated by Peckham et al.

Peckham et al disclosed a direct frequency modulation apparatus (column 3, lines 19-26) comprising: a voltage-controlled oscillator (Figure 2) whose oscillation frequency changes on the basis of voltages applied to first (Figure 2, the control terminal VTUNE in tank circuit 103) and second (Figure 2, the control terminal VC at the bottom of resistor 203) control terminals, the voltage controlled oscillator comprising first (214) and second (215) voltage-

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variable capacitive elements having first terminals commonly connected to the first control terminal, third (204) and fourth (205) voltage-variable capacitive elements having first terminals commonly connected to the second control terminal, first capacitor (208), second capacitor (209), inductor (216, 217).

Peckham et al disclosed ... a VCO (Figure 7) ... comprising ... inductor (comprised in tank circuit 103) ... first and second variable and fixed capacitors (120D) ... third and fourth variable and fixed capacitors (120E) ... first through fourth control circuits (the respective resistors connected to the nodes between the respective sets of variable and fixed capacitors) ... .

- 3. Claims 14, 15, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. Claims 1-12 are allowed.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Mis whose telephone number is (571)272-1765. The examiner can normally be reached on Monday through Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)272-1769.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Mis

Primary Examiner

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